

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A body fat measuring method comprising:

a step of passing a current between two current electrodes arranged on a circumference of a subject, a distance between the electrodes being sufficiently shorter than a circumferential length of the subject;

a step of measuring a first voltage generated between a first measuring electrode arranged adjacent to one of the two current electrodes and a second measuring electrode arranged substantially opposite to the two current electrodes across the subject; and

a step of computing a subcutaneous fat ~~quantity~~ thickness of the subject according to the first voltage.

Claim 2 (Currently Amended): The body fat measuring method of claim 1, ~~including:~~  
wherein the step of computing includes:

a step of measuring a second voltage generated when a current is passed in a direction substantially crossing the subject; and

a step of correcting the first voltage according to the second voltage and computing a subcutaneous fat ~~quantity~~ thickness of the subject according to the corrected first voltage.

Claim 3 (Original): A body fat measuring method comprising:

a step of passing a current between two current electrodes arranged on a circumference of a subject, a distance between the electrodes being sufficiently shorter than a circumferential length of the subject;

a step of measuring a first voltage generated between two measuring electrodes that are each arranged adjacent to the two current electrodes;

a step of measuring a second voltage generated when a current is passed in a direction substantially crossing the subject; and

a step of correcting the first voltage according to the second voltage and computing a subcutaneous fat quantity of the subject according to the corrected first voltage.

Claim 4 (Original): A body fat measuring method comprising:

a step of passing a current between two current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject;

a step of measuring a spatial potential gradient occurring on the circumference of the subject substantially at an intermediate position between the two current electrodes; and

a step of computing a fat quantity of the subject according to the spatial potential gradient.

Claim 5 (Original): The body fat measuring method of claim 4, including:

a step of measuring a first voltage generated between two measuring electrodes arranged substantially at an intermediate position between the two current electrodes on the circumference of the subject, the distance between the measuring electrodes being sufficiently shorter than a circumferential length of the subject, and finding the spatial potential gradient accordingly.

Claim 6 (Previously Presented): The body fat measuring method of claim 4, including:

a step of measuring a second voltage generated when a current is passed between two current electrodes arranged on the circumference of the subject, the distance between the two current electrodes being sufficiently shorter than a circumferential length of the subject; and

a step of correcting the spatial potential gradient according to the second voltage and computing a fat quantity of the subject according to the corrected spatial potential gradient.

Claim 7 (Previously Presented): The body fat measuring method of claim 4, wherein the fat quantity is a visceral fat quantity.

Claim 8 (Original): The body fat measuring method of claim 6, wherein the fat quantity is a visceral fat quantity.

Claim 9 (Original): A body fat measuring method comprising:  
a step of passing a current between two current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject;  
a step of measuring a voltage generated between two measuring electrodes that are each arranged adjacent to the two current electrodes; and  
a step of computing, according to the voltage, the ratio of a cross-sectional area of body fat of the subject on or near a cross section around which the electrodes are arranged to a cross-sectional area of the subject.

Claim 10 (Original): A body fat measuring method comprising:  
a step of passing a current between two current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject;  
a step of measuring a voltage generated between a measuring electrode arranged adjacent to one of the two current electrodes and a measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the two current electrodes; and

a step of computing, according to the voltage, the ratio of a cross-sectional area of body fat of the subject on or near a cross section around which the electrodes are arranged to a cross-sectional area of the subject.

Claim 11 (Previously Presented): The body fat measuring method of claim 9, wherein the cross-sectional area of the body fat is the sum of cross-sectional areas of subcutaneous fat and visceral fat.

Claim 12 (Original): A body fat measuring method comprising:  
a step of passing a current between two current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject;  
a step of measuring a voltage generated between two measuring electrodes that are each arranged adjacent to the two current electrodes; and  
a step of multiplying the voltage by a power of a characteristic quantity representing the size of the subject, and according to the product, computing a fat quantity of the subject.

Claim 13 (Original): A body fat measuring method comprising:  
a step of passing a current between two current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject;  
a step of measuring a voltage generated between a measuring electrode arranged adjacent to one of the two current electrodes and a measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the two current electrodes; and  
a step of multiplying the voltage by a power of a characteristic quantity representing the size of the subject, and according to the product, computing a fat quantity of the subject.

Claim 14 (Previously Presented): The body fat measuring method according to claim 12, wherein the fat quantity is the sum of subcutaneous and visceral fat quantities.

Claim 15 (Previously Presented): The body fat measuring method according to claim 12, wherein the characteristic quantity representing the size of the subject is a width or circumferential length of the subject.

Claim 16 (Original): The body fat measuring method according to claim 14, wherein the characteristic quantity representing the size of the subject is a width or circumferential length of the subject.

Claim 17 (Original): A body fat measuring method comprising:  
a step of passing a current between first and second current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject, measuring a first voltage generated between first and second measuring electrodes that are arranged adjacent to the first and second current electrodes, respectively, passing a current between third and fourth current electrodes arranged on the circumference of the subject substantially opposite to each other across the subject, and measuring a spatial potential gradient occurring on the circumference of the subject substantially at an intermediate position between the third and fourth current electrodes; and  
a step of computing a subcutaneous fat quantity of the subject according to the first voltage and spatial potential gradient.

Claim 18 (Original): A body fat measuring method comprising:

a step of passing a current between first and second current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject, measuring a first voltage generated between a first measuring electrode arranged adjacent to the first current electrode and a second measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the first and second current electrodes, passing a current between third and fourth current electrodes arranged on the circumference of the subject substantially opposite to each other across the subject, and measuring a spatial potential gradient occurring on the circumference of the subject substantially at an intermediate position between the third and fourth current electrodes; and

a step of computing a subcutaneous fat quantity of the subject according to the first voltage and spatial potential gradient.

Claim 19 (Original): A body fat measuring method comprising:

a step of passing a current between first and second current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject, measuring a first voltage generated between first and second measuring electrodes that are arranged adjacent to the first and second current electrodes, respectively, and measuring a second voltage generated when a current is passed between third and fourth current electrodes arranged on the circumference of the subject, a distance between the third and fourth current electrodes being; sufficiently shorter than a circumferential length of the subject; and

a step of computing a visceral fat quantity of the subject according to the first and second voltages.

Claim 20 (Original): A body fat measuring method comprising:

a step of passing a current between first and second current electrodes arranged on a circumference of a subject substantially opposite to each other across the subject, measuring a first voltage generated between a first measuring electrode arranged adjacent to the first current electrode and a second measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the first and second current electrodes, and measuring a second voltage generated when a current is passed between third and fourth current electrodes arranged on the circumference of the subject, a distance between the third and fourth current electrodes being sufficiently shorter than a circumferential length of the subject; and

a step of computing a visceral fat quantity of the subject according to the first and second voltages.

Claim 21 (Previously Presented): The body fat measuring method according to claim 19, wherein the third and fourth current electrodes are arranged at or around the position of the first or second current electrode.

Claim 22 (Currently Amended): A body fat measuring apparatus comprising:

two current electrodes adapted to be arranged on a circumference of a subject, a distance between the electrodes being sufficiently shorter than a circumferential length of the subject;

a first measuring electrode adapted to be arranged adjacent to one of the two current electrodes and a second measuring electrode arranged substantially opposite to the two current electrodes across the subject;

measuring means to pass a current between the two current electrodes and measure a first voltage generated between the first and second measuring electrodes; and

body fat computing means to calculate a subcutaneous fat quantity of the subject according to the first voltage measured with the measuring means.

Claim 23 (Currently Amended): A body fat measuring apparatus comprising:

two current electrodes adapted to be arranged on a circumference of a subject, a distance between the electrodes being sufficiently shorter than a circumferential length of the subject;

two measuring electrodes that are each adapted to be arranged adjacent to the two current electrodes;

measuring means to pass a current between the two current electrodes, measure a first voltage generated between the measuring electrodes, and measure a second voltage generated when a current is passed in a direction substantially crossing the subject; and

body fat computing means to correct the first voltage according to the second voltage measured with the measuring means and compute a subcutaneous fat quantity of the subject according to the corrected first voltage.

Claim 24 (Currently Amended): A body fat measuring apparatus comprising:

two current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

measuring means to pass a current between the two current electrodes and measure a spatial potential gradient occurring on the circumference of the subject substantially at an intermediate position between the two current electrodes; and



body fat computing means to compute a fat quantity of the subject according to the spatial potential gradient measured with the measuring means.

Claim 25 (Currently Amended): A body fat measuring apparatus comprising:  
two current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

two measuring electrodes that are each adapted to be arranged adjacent to the two current electrodes;

measuring means to pass a current between the two current electrodes and measure a voltage generated between the measuring electrodes; and

body fat computing means to compute, according to the voltage measured with the measuring means, the ratio of a cross-sectional area of body fat of the subject on or near a cross section around which the electrodes are arranged to a cross-sectional area of the subject.

Claim 26 (Currently Amended): A body fat measuring apparatus comprising:  
two current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

a measuring electrode adapted to be arranged adjacent to one of the two current electrodes and a measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the two current electrodes;

measuring means to pass a current between the two current electrodes and measure a voltage generated between the measuring electrodes; and

body fat computing means to compute, according to the voltage measured with the measuring means, the ratio of a cross-sectional area of body fat of the subject on or near a cross section around which the electrodes are arranged to a cross-sectional area of the subject.

Claim 27 (Currently Amended): A body fat measuring apparatus comprising:  
two current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;  
two measuring electrodes that are each adapted to be arranged adjacent to the two current electrodes;  
measuring means to pass a current between the two current electrodes and measure a voltage generated between the measuring electrodes; and  
body fat computing means to multiply the voltage measured with the measuring means by a power of a characteristic quantity representing the size of the subject, and according to the product, compute a fat quantity of the subject.

Claim 28 (Currently Amended): A body fat measuring apparatus comprising:  
two current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;  
a measuring electrode adapted to be arranged adjacent to one of the two current electrodes and a measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the two current electrodes;  
measuring means to pass a current between the two current electrodes and measure a voltage generated between the measuring electrodes; and  
body fat computing means to multiply the voltage measured with the measuring means by a power of a characteristic quantity representing the size of the subject, and according to the product, compute a fat quantity of the subject.

Claim 29 (Currently Amended): A body fat measuring apparatus comprising:

first and second current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

third and fourth current electrodes adapted to be arranged on the circumference of the subject substantially opposite to each other across the subject;

first and second measuring electrodes adapted to be arranged adjacent to the first and second current electrodes, respectively;

measuring means to pass a current between the first and second current electrodes, measure a first voltage generated between the first and second measuring electrodes, pass a current between the third and fourth current electrodes, and measure a spatial potential gradient occurring substantially at an intermediate position between the third and fourth current electrodes; and

body fat computing means to compute a subcutaneous fat quantity of the subject according to the first voltage and spatial potential gradient measured with the measuring means.

Claim 30 (Currently Amended): A body fat measuring apparatus comprising:

first and second current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

third and fourth current electrodes adapted to be arranged on the circumference of the subject substantially opposite to each other across the subject;

a first measuring electrode adapted to be arranged adjacent to the first current electrode and a second measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the first and second current electrodes;

measuring means to pass a current between the first and second current electrodes, measure a first voltage generated between the first and second measuring electrodes, pass a current between the third and fourth current electrodes, and measure a spatial potential gradient occurring substantially at an intermediate position between the third and fourth current electrodes; and

body fat computing means to compute a subcutaneous fat quantity of the subject according to the first voltage and spatial potential gradient measured with the measuring means.

Claim 31 (Currently Amended): A body fat measuring apparatus comprising:

first and second current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

third and fourth current electrodes adapted to be arranged on the circumference of the subject, a distance between the third and fourth current electrodes being sufficiently shorter than a circumferential length of the subject;

first and second measuring electrodes adapted to be arranged adjacent to the first and second current electrodes, respectively;

measuring means to pass a current between the first and second current electrodes, measure a first voltage generated between the first and second measuring electrodes, and measure a second voltage generated when a current is passed between the third and fourth current electrodes; and

body fat computing means to compute a visceral fat quantity of the subject according to the first and second voltages measured with the measuring means.

Claim 32 (Currently Amended): A body fat measuring apparatus comprising:

first and second current electrodes adapted to be arranged on a circumference of a subject substantially opposite to each other across the subject;

third and fourth current electrodes adapted to be arranged on the circumference of the subject, a distance between the third and fourth current electrodes being sufficiently shorter than a circumferential length of the subject;

a first measuring electrode adapted to be arranged adjacent to the first current electrode and a second measuring electrode arranged on the circumference of the subject substantially at an intermediate position between the first and second current electrodes;

measuring means to pass a current between the first and second current electrodes, measure a first voltage generated between the first and second measuring electrodes, and measure a second voltage generated when a current is passed between the third and fourth current electrodes; and

body fat computing means to compute a visceral fat quantity of the subject according to the first and second voltages measured with the measuring means.

Claim 33 (Previously Presented): The body fat measuring method of claim 5, including:

a step of measuring a second voltage generated when a current is passed between two current electrodes arranged on the circumference of the subject, the distance between the two current electrodes being sufficiently shorter than a circumferential length of the subject; and

a step of correcting the spatial potential gradient according to the second voltage and computing a fat quantity of the subject according to the corrected spatial potential gradient.

Claim 34 (Previously Presented): The body fat measuring method of claim 5, wherein the fat quantity is a visceral fat quantity.

Claim 35 (Previously Presented): The body fat measuring method of claim 33, wherein the fat quantity is a visceral fat quantity.

Claim 36 (Previously Presented): The body fat measuring method of claim 10, wherein the cross-sectional area of the body fat is the sum of cross-sectional areas of subcutaneous fat and visceral fat.

Claim 37 (Previously Presented): The body fat measuring method according to claim 13, wherein the fat quantity is the sum of subcutaneous and visceral fat quantities.

Claim 38 (Currently Amended): The body fat measuring method according to claim [[12]] 13, wherein the characteristic quantity representing the size of the subject is a width or circumferential length of the subject.

Claim 39 (Previously Presented): The body fat measuring method according to claim 37, wherein the characteristic quantity representing the size of the subject is a width or circumferential length of the subject.

Claim 40 (Previously Presented): The body fat measuring method according to claim 20, wherein the third and fourth current electrodes are arranged at or around the position of the first or second current electrode.

Claim 41 (New): A body fat measuring method comprising:

- a step of passing a current between two current electrodes arranged on a circumference of a subject, a distance between the electrodes being sufficiently shorter than a circumferential length of the subject;
- a step of measuring a first voltage generated between a first measuring electrode arranged adjacent to one of the two current electrodes and a second measuring electrode arranged substantially opposite to the two current electrodes across the subject;
- a step of measuring a second voltage generated when a current is passed in a direction substantially crossing the subject; and
- a step of correcting the first voltage according to the second voltage and computing a subcutaneous fat quantity of the subject according to the corrected first voltage.